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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

OLSON, LARS A

ART UNIT PAPER NUMBER

3617

DATE MAILED: 10/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,342

Applicant(s)

MISORSKI ET AL.

Examiner

Lars A Olson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-7, 9-17, 19-22 and 24-32 is/are rejected.
- 7) ☒ Claim(s) 8, 18 and 23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02172004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 7, 9, 11, 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Takasaki et al. (US 6,312,821).

Takasaki et al. discloses the same marine propulsion device as claimed, as shown in Figures 1 and 2, that is comprised of an outboard motor, defined as Part #10, with an aluminum gear housing structure, defined as Part #11, and an aluminum drive shaft housing, defined as Part #12, that is attached to said gear housing, and a polymer layer, defined as Part #24, that is chemically bonded on an outer surface of said gear housing structure and said drive shaft housing, as shown in Figure 2, with an adhesion promoting substance, defined as Part #23, facilitating adhesion of said polymer layer to said outer surface of said gear housing structure and said drive shaft housing.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takasaki et al.

Takasaki et al., as set forth above, discloses all of the features claimed except for the use of a gear housing structure with a thermal coefficient of expansion that is generally similar to a thermal coefficient of expansion of a polymer layer.

The use of a polymer layer with a thermal coefficient of expansion that is similar to a thermal coefficient of expansion of a metallic part that is to be coated by said polymer layer would be considered by one of ordinary skill in the art to be a design choice for the purpose of matching said thermal coefficients of expansion in order to minimize cracking of or damage to said polymer layer resulting from thermal expansion of said metallic part.

5. Claims 3-6, 10, 14, 16, 17, 19-22, 24-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takasaki et al. in view of Rafferty et al. (US 5,656,376).

Takasaki et al., as set forth above, discloses all of the features claimed except for the use of a polymer layer comprised of a fiber, glass or carbon filled polymer, and a polymer layer that is molded around a metallic gear housing structure.

Rafferty et al. discloses a laminate structure for use with marine propulsion devices, as shown in Figures 1-35, said laminate structure being comprised of a polymer in the form of an epoxy resin with reinforcement material in the form of fibers,

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glass or carbon added to increase the strength of said polymer, as described in lines 40-56 of column 8, where said polymer can be molded onto a marine propulsion device, as described in lines 13-23 of column 2.

The use of a polymer layer with a thermal coefficient of expansion that is similar to a thermal coefficient of expansion of a metallic part that is to be coated by said polymer layer would be considered by one of ordinary skill in the art to be a design choice for the purpose of matching said thermal coefficients of expansion in order to minimize cracking of or damage to said polymer layer resulting from thermal expansion of said metallic part.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a polymer layer comprised of a fiber, glass or carbon filled polymer that can be molded onto a marine propulsion device, as taught by Rafferty et al., in combination with the marine propulsion device as disclosed by Takasaki et al. for the purpose of providing a marine propulsion device with a molded polymer coating that protects said device from corrosion and other damage.

Allowable Subject Matter

6. Claims 8, 18 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Akahori (US 5,139,449) discloses a method for preventing rust on an aluminum outboard motor by coating said motor with an anodic oxide film.

Westberg et al. (US 5,069,643) discloses a molded lower motor cover for an outboard motor. Rocka (US 3,939,795) discloses a protective cover for an outboard motor.

8. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (703) 308-9807.

lo

October 19, 2004

LARS A. OLSON
PATENT EXAMINER



10/19/04